In the part of the work on the solids, the author notices a new position in which he has discovered the ciliated epithelium to exist, viz., in the convolutions of the epididymis.

His investigations also confirm the view of Schwann, that the Purkinjean corpuscle of bone is a complete cell, and the canaliculi prolongations of the cell wall.

In reference to the almost universal opinion of later physiologists, that the nerves of muscles form loops, which either join other neighbouring loops, or else return into themselves, Mr. H. observes: "I have never seen the nerves terminating in muscle in the manner indicated; not, however, that I doubt the fact of their doing so, because such a mode of termination is common to nerves; but would simply infer from this, that the loop-like arrangement is neither very general nor very obvious.

"According, then, to the latest physiologists, nerves, strictly speaking, really have no termination whatever in muscles: an opinion the accuracy of which is more than doubtful.

"I find that the nerves, after branching in a dichotomous manner, have a real termination, and that from time to time certain tubules leave the main trunks, and end in the formation of elongated and ganglioniform organs situated between the fibres of muscle."

In the medullary matter of the cerebrum, cerebellum, and spinal marrow, the author has discovered intermingled with the tubular structure, globular bodies, which are perfectly independent of the oleo-albuminous matter of the interior of the tubules. These bodies are very numerous, invariably present, and vary in size from the diameter of the tubuli to ten times the diameter of the same. Whether they are true cells, he failed to determine.

According to the investigations of Mr. H., the air-cells of the lungs freely communicate, and are lined by ciliated, cylindrical epithelia.

In regard to the biliary ducts terminating in a lobular biliary plexus, the author presumes it to be concluded that no such an arrangement exists, and bases his views upon those of Dr. Hanfield Jones, whose coarse mode of investigating the structure was followed by Mr. H. with, of course, the same result. "If a branch of the hepatic duct be taken up with the forceps, it may, by delicate manipulation, be dissected out from the surrounding parenchymatous tissue. A branch thus prepared, when placed under the microscope, will be seen to be composed of numerous ramified biliary ducts of various sizes: the extremities of the majority of these are even broken off; but several are evidently entire, and these are rounded." We cannot understand how the most delicate manipulation of the scalpel and forceps is able to obtain anything further than some of the smaller trunks of the biliary ducts, and we can conceive of no better mode of obtaining a true idea of the lobular structure, than by injecting the capillary vessels to avoid error, and then examining thin sections with a moderately high power of the microscope.

Much space has been devoted to the consideration of the pathological conditions of the kidney, principally derived from the researches of Toynbee, Johnson, Simon, and Gairdner.

Without examining further into the merits of the work, we recommend it to students and others as being the best epitome of the microscopic anatomy of the human body in the English language. J. L.

ART. XVIII.—*Surgical Anatomy*, by JOSEPH MACLISE, Surgeon: with coloured plates. Part Second. Philadelphia, Lea & Blanchard, 1850.

IN the number of this journal for January last, we noticed the first part of Mr. Maclise's book, and acknowledged in terms of merited commendation the excellence of the work. The style of the author was sometimes rather laboured, and wanting in that transparency which is so particularly desirable in a scientific treatise; but we felt unwilling to call attention to this defect, because

the instructions were so good. The second part is now published, and in it we are happy to observe much less of the fault alluded to, with the same careful description and accurate delineation which pleased us so much in the first.

The preceding fasciculus concluded with an explanation of the surgical anatomy of the forearm; the present is devoted to the consideration of the wrist and hand; to some points of the anatomy of the neck and head, which were not previously noticed; to the thoracic and abdominal cavities, and to the inguino-femoral region. It will thus be perceived that the author has here taken upon himself a very arduous task; one which demands for its successful accomplishment great familiarity with some of the most important and intricate points in the whole domain of surgical anatomy, and one which, if well performed, cannot fail to be productive of lasting benefit to the student. A more detailed enumeration of the contents of the part before us will assist in the determination of its value.

The first three plates, Nos. 17, 18, and 19, exhibit the anatomy of the wrist and hand. In the text associated with them, these parts are very well described, and the items of chief interest in a surgical point of view are adverted to. These are the relative situations of the vessels and nerves to each other, to the muscles and to the bony structure; the free anastomosis of the arteries, and the occasional irregularities in their origin and distribution, together with the inference desirable from these circumstances, with regard to the difficulty of arresting hemorrhage from these vessels, and the mode by which this accident may be controlled, particularly in the event of a wound of the palmar arteries.

Plates 20 and 21 present views of "the relative position of the cranial, nasal, oral and pharyngeal cavities, &c;" and the general and particular conformations of these parts are explained in the commentary. The author takes a comprehensive view of the subject, points out how, from continuity of structure, in some instances, disease and injury at one point affect other parts; and how, from dissimilarity of structure in other instances, the progress of disease is naturally limited. The particular topics of surgical interest relate to the occurrence of fracture of the cranium, and the peculiarities of this accident from the shape and structure of the cranial bones; the points to be avoided in the application of the trephine to the skull; the conformation of the cavities of the nose, mouth, and pharynx, together with hints as to the introduction of the catheter into the Eustachian tube, the nasal duct, and the stomach.

The next five plates, 22 to 26, inclusive, should be studied in connection with the first and second of the preceding number. They form, together with the author's remarks thereon, a very complete survey of the regional anatomy of the thoracic and abdominal cavities; and we feel confident that the excellence of this part of the treatise will be acknowledged by every attentive reader.

The first two sections describe the relative position of the organs of the chest and abdomen. Mr. Maclise calls attention to the fact that the line of demarcation between these two cavities is not precisely determined. "In birds and many reptiles, *e. g.* the costal arches enclose the common thoracico-abdominal region, as if it were a common pulmonary region. In fishes, the costal arches enclose the thoracico-abdominal region just as if it were a common abdominal region." In man, however, the ribs are in relation with the thoracic organs only, and, together with the interposed diaphragm, isolate the thorax as a region from the abdomen. Nevertheless, this membranous septum is constantly changing its position under the influence of the physiological actions which take place in the organs contained in these cavities, and of many diseased conditions to which they are respectively liable. Hence, the thoracic cannot maintain any fixed relative position to the abdominal viscera, neither is the local relation of the different organs of either of these cavities to each other invariable. These facts are of importance to the surgeon and to the physician with reference to the diagnosis of injuries and diseases; and Mr. Maclise devotes several pages to the discussion of this subject, not only in general terms, but with allusions to many of the particular conditions upon which these changes of relation depend.

The twenty-fourth plate and its commentary display "the relations of the principal blood-vessels to the viscera of the thoracico-abdominal cavity," together

with a few suggestions as to the diagnosis and etiology of some of the diseased conditions of the organs therein contained.

In the next plate is presented a view of the principal blood-vessels of the thorax and abdomen, with reference to their relation to the osseous skeleton. In the text, the author points out the analogy which exists between the configuration of the bony framework of the chest and that of the great arterial trunk with its outspringing branches, and contends that the individual blood-vessels, particularly the arteries, possess forms as characteristic of their situation and mode of distribution as do the separate pieces of the skeleton, and may just as readily be assigned "a local habitation and a name." He also demonstrates the general correspondence between the superior and inferior great branches of the aorta; a correspondence which is not only interesting to the philosophical anatomist as showing a certain uniformity of type, but is important to the practical surgeon as reminding him of the possibility of such an arrangement in any individual case, and of the necessity of preparing for it in the event of an operation. Some other departures from the general type of the aorta are alluded to. Such digressions from the hard-worn highway of anatomical investigation as are met with in this chapter, "serve to lighten the dry and weary detail of descriptive anatomy, at the same time that they lead directly to points of practical import;" they are like the grassy by-paths which allure the traveller from the dusty turnpike to the fields and shaded spring—they are always welcome.

The following chapter comes as a very natural sequent to the several sections which precede it, and treats of "the relation of the internal parts to the external surface of the body." The author remarks that "the abnormal conditions of *the surface* become at once apparent to our senses; but those diseased conditions which concern the internal organs require no ordinary exercise of judgment to discover them." The object of this chapter is to show which of the internal organs are most liable to become deviated from their normal relationship with certain points upon the surface of the body, which ordinarily serve to mark their position; how this deviation is occasioned, and how, when an operation is called for, such organs may best be reached in their abnormal situations.

"The surgical dissection of the superficial blood-vessels, &c., of the *inguino-femoral* region," forms the subject of the succeeding section and plate.

The anatomy of hernia is, or was, the bugbear of the young student. We well remember the dread which the mere allusion to it excited in our mind. It presented such a wilderness of names appended to arbitrary divisions, often of one and the same tissue; and there were such seeming confusion and discord in the opinions of distinguished anatomists and surgeons respecting the several parts involved, that we felt impelled to imitate the conduct of all pious pilgrims, whose journey led them through forests, haunted by goblins and demons; we resolutely closed our eyes and our ears, and prayed to be preserved from all knowledge of such "sights and sounds unholy." Evidently the subject has been studied "not wisely, but too well;" as if it were desirable not to render the matter plain and easily comprehended, but to see how much could be made of it. A simplified description of the anatomy of the region concerned, such as is presented by Mr. Maclise, will, therefore, we doubt not, be acceptable to all. He first touches upon the artificial difficulties which have been thrown around the subject of hernia; passes then to a brief statement of the causes of the accident; and reviews its nomenclature, the chief situations at which it occurs, with the reasons for such selections, and then demonstrates the superficial anatomy of the inguino-femoral region. He thus considers the inguinal and femoral regions, "not separately, but as a relationary whole; for as both regions are blended together by structures which are common to both, so do the herniæ which are described as being proper to either region, occur in such close connection, as at times to render it very difficult to distinguish between them." The chapter is written with unusual clearness, and there is an evident desire on the part of the author to simplify the subject, and to make it easily understood; and the drawing of the parts is admirably executed and well illustrates the text. The following extract will serve to exhibit the

aim and spirit of the author. He says, "the practitioner who would arm his judgment with the knowledge of a broad fact or principle, should not allow his serious attention to be diverted by a pursuit after any useless and trifling details; for not only are they unallied to the stern requirements of surgical skill, but they serve to depose it from the rank and roll of the sciences. Whilst operating for the reduction of inguinal hernia by the taxis or the bistoury, who is there that feels anxiety concerning the origin or the distinctiveness of the "spermatic fascia?" Or, knowing it to be present, who concerns himself about the better propriety of naming it "tunica vaginalis communis," "tunique fibreuse du cordon spermatique," "fascia cremasterica," or "tunica aponeurotica?"

The same subject is continued in the next and last chapter of the present number, which is entitled "the surgical dissection of the first, second, third, and fourth layers of the inguinal region, in connection with those of the thigh;" and the text is accompanied by two excellent plates. The clearness of exposition and the avoidance of all prolix and unnecessary detail which characterize the preceding chapter, equally mark this. It is very well adapted both to serve as a guide to the student in dissecting the parts described, and to refresh the mind of the operator, who is about to attempt the relief of a strangulated hernia; and this, we apprehend, is all that can be desired or expected.

In short, the satisfaction which the perusal of the first part of Mr. Maclise's book afforded us, is renewed in this, both with regard to the drawings and the commentary. And we cannot but feel assured, from these specimens, that the ensuing numbers will prove equally valuable in furnishing a safe and practical treatise on the surgical anatomy of the regions which remain to be described.

F. W. S.

Art. XIX.—*Essays on the Puerperal Fever, and other Diseases peculiar to Women, selected from the Writings of British Authors previous to the close of the Eighteenth Century, by request of the Sydenham Society.* Edited by Fleetwood Churchill, M.D., M. R. I. A., &c. &c. Philadelphia, Lea & Blanchard, 1850: 8vo. pp. 464.

The present volume comprises the essays of Denman, Hulme, Leake, Charles White, Kirkland, Butter, Joseph and John Clarke, and Gordon on Puerperal Fever; Dr. John Clarke's "Directions for the Management of Pregnancy and Labour, with a View to Prevent Disease"—his remarks on "Retroversion of the Uterus, Milk Fever, Inflammation and Suppuration of the Breasts;" Fothergill on the "Management proper at the Cessation of the Menses;" Macbride's "Cases of Tumefaction of the Labium after Delivery;" Clarke on "Cauliflower Excrescence of the Os Uteri," and his two cases of Tumour of the Uterus, with Dr. Denman's Account of an Excrescence from the Womb.

To these papers Dr. Churchill has appended notes, embodying whatever information has been laid before the profession since their authors' time. He has also prefixed to the essays on puerperal fever, which occupy the larger portion of the volume, an interesting historical sketch of the principal epidemics of that disease.

The whole forms a very valuable collection of papers by professional writers of eminence, on some of the most important accidents to which the puerperal female is liable; and although on most of these we have more recent treatises and monographs, in which the facts recorded by preceding writers have been confirmed and amplified, and many of their errors in pathology and practice pointed out and corrected, still the essays before us are replete with matters calculated to interest and instruct the physicians of the present day. With the opinions and observations which they present, no one should, at least, be ignorant, who would lay claim to the character of a well informed practitioner.

On puerperal fever, a disease with the true pathology and proper treatment—the etiology and prevention—of which we, unfortunately, as yet know but little, if anything, the tracts in the present volume have been selected so as to